Paper Reference 31761H
Pearson BTEC Level 3
Nationals Certificate, Extended Certificate, Foundation Diploma, Diploma, Extended Diploma

INFORMATION TECHNOLOGY
UNIT 2: CREATING SYSTEMS TO MANAGE INFORMATION
(PART B)

Thursday 14 January 2021 – Morning

Time: 2 hours plus your additional time allowance.

YOU MUST HAVE:
activity6.rtf,
activity7.rtf,
partB_database.accdb
or
partB_database.mdb

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ITEMS INCLUDED WITH QUESTION PAPER
- Instructions to Invigilators.
- Instructions for Learners.
- **Part B** Set Task Brief.

INSTRUCTIONS
- **Part A** and **Part B** contain the material for the completion of the set tasks under supervised conditions.
- There are 40 marks for **Part A** and 26 marks for **Part B**, giving a total mark for the set tasks of 66.
- **Part A** and **Part B** are specific to each series and this material must be issued only to learners who have been entered to take the tasks in the specified series.
- Learners **MUST ONLY** have access to **Part B** during this examination session.

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- **This booklet should be kept securely until the start of the 2 – hour (plus your additional time allowance) supervised assessment period.**
- **Part A materials MUST NOT be accessed during completion of Part B.**
- **Part A and Part B should be submitted together for each learner.**
- **This booklet should not be returned to Pearson.**
- **Answer ALL activities.**

INFORMATION
- **The total mark for this paper is 26.**

Part B Set Task is on the next page.

Part B SET TASK

Look at the Set Task Brief Book provided separately.

YOU ARE ADVISED TO SPEND 10 MINUTES (plus your additional time allowance) READING THE TASK SCENARIO AND THE ACTIVITIES YOU ARE TO COMPLETE.

YOU MAY MAKE NOTES AND/OR HIGHLIGHT INFORMATION TO USE IN THE COMPLETION OF THE DOCUMENTS YOU NEED TO PRODUCE FOR YOUR TASK.

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Turn over

YOU MUST COMPLETE ALL ACTIVITIES WITHIN THE SET TASK.

PRODUCE YOUR DOCUMENTS USING A COMPUTER.

SAVE YOUR DOCUMENTS IN YOUR FOLDER READY FOR SUBMISSION USING THE FORMATS AND NAMING CONVENTIONS INDICATED.

ACTIVITY 6: FORMS – You are advised to spend 1 hour and 10 minutes (plus your additional time allowance) on this activity.

NOTE

- **The structure of the tables provided should not be changed in any way, e.g. do not add validation to the tables, do not change data types.**
- **You will ONLY be required to use tblArtist and tblArt.**

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Activity 6. continued.

Create an efficient interface that will facilitate database input by producing:

(a) an input form to add a piece of art.

- The form should be ready for data entry.
- The name of the piece of art must be present.
- The selling price must be within the specified range.
- The piece of art must be assigned a valid artist.
- Valid data should be appended to the art table, a save message should display and the form should be cleared ready for the next data entry.
- A suitable error message should appear where invalid data has been used.

Activity 6. continued.

(b)   an input form to analyse sales and add an artist's rating.

- **The form should NOT include validation for any fields.**
- **The form should NOT include an automated routine to save the data.**
- **There must be a combo box in order to select the artist.**
- **There must be a combo box in order to select the rating.**

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Activity 6. continued.

- Once the user selects an artist, information for that artist should be generated and displayed in fields on the form:
  - the artist's email
  - the total number of pieces of art
  - the number of pieces of art sold
  - the highest price for a piece of art
  - the lowest price for a piece of art
  - the total amount of money made from sales.

Evidence your interface as screenprints using the given **activity6.rtf** template.

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Activity 6. continued.

Your screenprints must show:

- the DESIGN view and FORM view of all the forms you have created
- the DESIGN view of any queries you have created and used with the forms including fields and criteria
- the DATASHEET view of any queries you have created and used with the forms
- details of any calculations, validation and macros/code you have created and used with the forms.

Ensure sufficient information is provided to allow a competent third party to maintain the database.

Save the evidence of your interface as a PDF in your folder for submission as

activity6_[Registration number #]_[surname]_[first letter of first name]

(TOTAL FOR ACTIVITY 6 = 14 MARKS)

ACTIVITY 7: INTERFACE TESTING –

You are advised to spend 20 minutes (plus your additional time allowance) on this activity.

Test the interface of your relational database using suitable test data (normal, erroneous and extreme as appropriate).

You must not add validation to any of the tables.

You must provide evidence of FORM LEVEL testing that proves:

1. the art input form is ready for data entry when the form opens
2. the name of the piece of art must be present
3. the selling price of the piece of art cannot be above the top of the range

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Activity 7. continued.

4. the selling price of the piece of art cannot be below the bottom of the range

5. the piece of art must be assigned to a valid artist

6. a record will save in the art table if all of the required data is present and valid

7. these details appear for the artist selected on the sales form:
   - the artist's email
   - the total number of pieces of art
   - the number of pieces of art sold
   - the highest price for a piece of art
   - the lowest price for a piece of art
   - the total amount of money made from sales.

Complete the test log to show how you have tested your input forms using the given activity7.rtf template.

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Activity 7. continued.

Save your test log as a PDF in your folder for submission as

activity7_[Registration number #]_ [surname]_[first letter of first name]

(TOTAL FOR ACTIVITY 7 = 6 MARKS)

ACTIVITY 8: INTERFACE EVALUATION – You are advised to spend 20 minutes (plus your additional time allowance) on this activity.

Evaluate your interface.

You should consider the quality, performance and usability of the interface you have created in terms of how well it ensures:

Art form
- the art form is ready for data entry when the form opens
- the name of the piece of art must be present
- the selling price of the piece of art cannot be above the top of the range

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Activity 8. continued.

- the selling price of the piece of art cannot be below the bottom of the range
- the piece of art must be assigned to a valid artist
- a record will save in the art table if all of the required data is present and valid

Sales analysis form

- these details appear for the artist selected on the sales form:
  - the artist's email
  - the total number of pieces of art
  - the number of pieces of art sold
  - the highest price for a piece of art
  - the lowest price for a piece of art
  - the total amount of money made from sales.

Activity 8. continued.

Save your evaluation as a PDF in your folder for submission as

activity8_[Registration number #]_ [surname]_[first letter of first name]

(TOTAL FOR ACTIVITY 8 = 6 MARKS)

TOTAL FOR PART B = 26 MARKS

END